

Work Order ID 85146

85146

Page 1

June-04-12 1:28:08 PM

Item ID: D350-636-015

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/04 Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3492	C								
D4168	A								
IIN-D350-636	I								

100
100

DOCUMENT CONTROL

0.00

DC
Document Control

Memo

0.00

Photocopy blue file and type labels per PPP D350-636-015 CHG 003

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

110

Skidtubes

Skidtubes

Memo

0.00

1- Pick D2600-3 Bent

*BE 12/06/28*2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside
AFT end per dwg D4168*BE 12/06/28*3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500",
deburr, section H-H*BE 12/06/28*4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade
fitting, section H-H5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as
per dwg D4168, detail A*BE 12/06/28*6- Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill
Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE*BE 12/07/03*

8- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole.

9-Open up holes of Detail A to 0.297" (total of 2 holes per side) and .201" (total
of 1 hole per side) open holes of detail D section H-H to 0.500" as per dwg
D416810-Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left
from bending as per QSI 004*BE 12/06/28*

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

A/R Aluminum Rod batch: M122130

11-Grind welds flush as per Dwg D4168

B 12/07/03

120 QC10- Inspect visual per QSI004- ground welds 0.00

120

QC

Memo

Quality Control

5.2/07/11

130 QC5- Inspect part completeness to step on W/O 0.00

130

QC

Memo

Quality Control

5.2/07/11

XL

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									
150	QC3- Inspect Part Finish	0.00							
150									
QC	Memo	0.00							
Quality Control									

1 76 12-7-12

① SAD 12-07-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
12-07-13	150	change a ₃ to a ₇					

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--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

0.00

160

Skidtubes

0.00

Skidtubes

Skidtubes

Memo

1-Open up holes of Detail C and ground handling section AL-AL to 0.625"
(total of 8 holes per side)
as per dwg D4168.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side)
as per dwg D4168.

3- Open float hole to 0.500" (4 per side) section AJ-AJ

Open wearplate holes to size as per dwg (4 holes per sides) , section CG-CG

4-Chamfer holes of Detail B, C, ground handling section AL-AL and float holes
section AJ-AJ per dwg D4168 (welding instructions on sheet 8)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291 batch: 121469

exp. date: 13-4-1212/07/13

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1
& QSI004

(welding instructions on sheet 8)

A/R Aluminum Rod batch: M122130

9- At section AJ-AJ drill out x-bolt spacer to 0.404"

3 BE 12/02/13

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10-Grind welds flush as per Dwg D4168 *SAD*

11-Spot face ground handling holes section (total of 4 places per side) as per dwg D4168, section AL-AL

12- C'bore section CG-CG

13- Deburr holes

***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING HOLE IN TUBE *****

3 SAD 12-07-20

yes > DP 12-7-25

170

QC10- Inspect visual per QSI004- ground welds

0.00

170

QC

Memo

0.00

Quality Control

DAS 16 9-83 1/4/25

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SPC (Y/N):

Date:

Stop ***NR2***

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180 QC5- Inspect part completeness to step on W/O

0.00

DAS 16 9-83 17/6/25

180

QC

Memo

0.00

Quality Control

190 Pressure Wash per QSI005 4.3

0.00

190

HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

1 PG 12-7-25

200 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

200

Powdercoat

Memo

0.00

Powder Coating

START TIME: *7:30*
OVEN TEMPERATURE: *320 °F*
FINISH TIME: *8:00*

1X4 M-T 12/7/26

ml 21841

W/O:		WORK ORDER CHANGES					
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QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

210 QC3- Inspect Part Finish

0.00

210

0.00

QC

Memo

Quality Control

Inspect for foreign object per QSI 024

220

0.00

220

HandFinishing

0.00

HandFinish

Memo

Hand Finishing

1- Install inserts as per Dwg D4168

1411 / 11 12/07/30

1 R+1 f all n/07/30

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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230

230

HandFinish

Hand Finishing

HandFinishing

Memo

✓ 1-Inspect for Foreign Objects

✓ 2-Spray inside of tube with "LPS-3" batch: 1010

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168

✓ SIKA FLEX 241

BATCH: 11127140

EXP DATE: 11103

✓ 4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube
A/R 55-o'ring lube batch: 1110348

✓ 5-Coat all exposed fasteners with "LPS Procyon" batch: 1114596

1611 1 12/07/12

240

240

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

DAS
16
9-83 17/08/12

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250	Pick Kit	0.00							
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250

Packaging

Packaging

Memo

If making a D350-636-215
pick kit will only requires:
1 X AN3C37A
1 X AN3C34A
1 X AN3C42A
2 X D3493-1

0.00

260	QC4- 100% Inspect kits for completeness	0.00							
-----	---	------	--	--	--	--	--	--	--

260

QC

Quality Control

Memo

*****ensure antiseize is on AN8C21A bolts*****

0.00

DAS 16 9-83 12/8/09

270	Packaging	0.00							
-----	-----------	------	--	--	--	--	--	--	--

270

Packaging

Packaging

Memo

Identify and pack for shipping as per PPPD350-636-015
Location: _____
PPP rev: _____

0.00

12/8/10

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Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursTool ID Tool # Plan
CodeAccept Reject Reject Insp.
Qty Qty Number Stamp

280

QC21- Final Inspection - Work Order Release

0.00

280

QC

Memo

0.00

Quality Control

12/8/10
1205-10

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Picklist Print

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Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC IPP Rev:B
11.04.14 ecn11-553 DD verf:EC IPP Rev:C 11.10.18 as per
NCR 11-906 DD verf:EC IPP Rev:D 112.04.16 AS PER ECN 12-
542 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C34A		Purchased	No			230	Each	41.0000	1	1		10/8/8	
AN3C34A									**				
BOLT													

Location	Loc Qty	Loc Code
ST353	41	
116075	21	
117514	20	

AN3C36A		Purchased	No			230	Each	162.0000	4	4		12/07/30	
AN3C36A									**				
BOLT													

Location	Loc Qty	Loc Code
FG	4	
101261	4	
ST353	158	
116590	0	
119083	2	
119324	23	
121388	33	
121389	50	
121689	50	

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Start Qty: 1.00

Required Qty: 1.00

AN3C37A

Purchased No

230 Each

141.0000

1 1

AN3C37A

BOLT

**

1121587sf



Location

Loc Qty

Loc Code

ST354

141

116874

11

117010

2

120422

3

121068

75

121585

50

AN3C42A

Purchased No

230 Each

32.0000

1 1

AN3C42A

BOLT

**

sf



Location

Loc Qty

Loc Code

ST354

32

106176

1

120464

6

121103

25

D3492-1

Manufactured No

230 Each

257.0000

8 8

D3492-1

Plug

**

sf 12/07/30

Location

Loc Qty

Loc Code

FP002

242

69531

8

74444

2

76235

4

83259

228

FP-A

15

83098

15

Dart Aerospace Ltd

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3492-3 Manufactured No

230

Each

167.0000

8

8

D3492-3

Plug

**

HL 0107/30

Location

Loc Qty

Loc Code

FP-A

167

B85161

81967

5

x 0

83099

40

83529

122

D3873-1 Manufactured No

230

Each

462.0000

7

7

D3873-1

Bushing

**

HL 12/07/30

Location

Loc Qty

Loc Code

ST057

6

79561

6

ST067

456

64760

1

68247

4

73829

19

73830

2

76791

410

y 7

79560

20

D4154-041 Manufactured No

230

Each

0.0000

1

1

D4154-041

Wearplate Assembly

**

B83693 (x1) HL 0107/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D4170-1 Manufactured No

230 Each 95.0000 4 4

D4170-1

Bushing

**

BE 12/07/19

Location	Loc Qty	Loc Code
LG	50	
82222	50	
LG001	45	
71844	5	
82043	40	

4

D4171-1 Manufactured No

230 Each 22.0000 1 1

D4171-1

Bushing

**

HL 12/07/30

Location	Loc Qty	Loc Code
ST104	22	
77008	2	
82385	20	

Y-1

MS21043-3 Purchased No

230 Each 1,557.000 4 4

MS21043-3

Nut

**

HL 12/07/30

Location	Loc Qty	Loc Code
FG	72	
103691	72	
GA	14	
120693	14	
ST301	1471	
118077	2	
118614	51	
118686	30	
119758	20	
121255	368	
121708	1000	

Y-1

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0363R

Purchased

No

230

Each

2,958.000

8

NAS1149C0363R

Washer

**

87
HL 11/07/13

Location

Loc Qty

Loc Code

ST297

2958

114742

2958

87

NAS1515H3L

Purchased

No

230

Each

146.0000

4

***NAS1515H3L ***

WASHER

**

HL 11/07/13

Location

Loc Qty

Loc Code

FG

40

102472

40

11122151

HL

ST277

106

118686

3

119438

1

120360

11

121243

2

121556

89

NAS1611-010

Purchased

No

230

Each

188.0000

8

NAS1611-010

O-RING

**

HL 11/07/13

Location

Loc Qty

Loc Code

FP001

188

110915

14

117460

8

118077

1

118612

3

119438

47

121259

2

121415

4

121584

59

121723

50

11122151

HL

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

230

Each

361.0000

8

8

NAS1611-013

O-RING

**

41 12/07/30

Location

Loc Qty

Loc Code

FP001

361

116582

5

117291

2

117887

53

119623

36

121584

15

121825

200

x8

121826

50

NAS1149D0863J

Purchased

No

250

Each

251.0000

2

2

NAS1149D0863.J

WASHER

**

41 12/07/30

Location

Loc Qty

Loc Code

ST298

251

118078

34

119307

17

120308

100

121556

100

V2

D2744

Manufactured

No

110

Each

35.0000

1

1

D2744

Cap

**

8E 12/06/28

Location

Loc Qty

Loc Code

LG002

35

62715

1

78900

3

83412

31

1

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

29.0000

1

1

D2600-3-BENT

Extrusion Bent

BE 12/06/28
B86330 x1

Location

Loc Qty

Loc Code

LG

29

66875

7

73253

1

75021

1

75022

1

75023

1

81330

4

83305

1

83442

13

D2743

Manufactured No

160

Each

296.0000

8

8

D2743

Crossbolt Spacer

BE 12/07/19
B86459 x8

Location

Loc Qty

Loc Code

LG

222

81965

55

83262

167

LG001

74

67766

4

68251

3

73403

64

74445

1

79517

2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2739 Manufactured No

160 Each

13.0000 1 1

D2739

3501 Beam

**

DE 12/07/13
①

Location	Loc Qty	Loc Code
B85487		
LG	13	
72155	1	
81508	1	
83447	4	
83448	5	
83548	2	

D3490-3 Manufactured No

160 Each

46.0000 4 4

D3490-3

Cross Bolt Spacer

**

BE 12/07/19
B85420 4

Location	Loc Qty	Loc Code
LG001	46	
83313	46	

D3490-1 Manufactured No

160 Each

45.0000 4 4

D3490-1

Cross Bolt Spacer

**

BE 12/07/19
B85419 4

Location	Loc Qty	Loc Code
LG	2	
81976	2	
LG001	43	
62450	2	
74875	4	
77042	3	
83269	34	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-225

Purchased

No

230

Each

781.0000

4

4

AI S4-1032-225 ✓ /

**

HL 12/07/30

Insert

Location

Loc Qty

Loc Code

ST281

758

108696

146

11122290

xd

110768

62

118386

55

118966

68

121269

427

ST282

23

120410

10

120451

13

AN8C35A

Purchased

No

230

Each

68.0000

1

1

AN8C35A

**

HL 12/07/30

BOLT

Location

Loc Qty

Loc Code

FP002

67

115960

1

118286

16

121275

50

ST346

1

114442

0

115188

0

115960

1

D3488-041

Manufactured

No

230

Each

9.0000

1

1

D3488-041

**

HL 12/07/30

Blade Fitting Assembly, LH

Location

Loc Qty

Loc Code

FP002

9

61689

1

82271

8

B45807

x1

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN6C44A	Purchased	No	230	Each	86.0000	4	4
AN6C44A						**	sl n/07/30
BOLT							

Location	Loc Qty	Loc Code
FG	2	
103964	2	y712220-1
ST343	84	
121013	11	
121167	13	
121440	50	
121689	10	

MS21083C8	Purchased	No	230	Each	81.0000	1	1
MS21083C8						**	sl n/07/30
NUT							

Location	Loc Qty	Loc Code
304	75	
121185	29	
121349	46	y1
FP002	1	
115884	1	
ST303	4	
115884	0	
118077	1	
119309	2	
119638	1	
ST304	1	
121524	1	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3631-1 Manufactured No

230 Each 347.0000 8 8

D3631-1

Washer

**

yl 12/07/31

Location	Loc Qty	Loc Code
FG	332	
81874	2	
83588	330	
ST072	15	xg
68062	2	
75548	13	

AN960C10L NAS1149C0332 Purchased No

230 Each 0.0000 4 4

***AN960C10I *** y

washer

11122063 **

(x1) yl 12/07/30

D2745 Manufactured No

230 Each 122.0000 8 8

D2745

Bushing

**

yl 12/07/30

Location	Loc Qty	Loc Code
FP	6	
79518	6	
FP001	116	B85446
69529	1	xg
76142	1	
83260	114	

NAS1149C0832R Purchased No

230 Each 257.0000 1 1

NAS1149C0832R

WASHER

**

yl 12/07/30

Location	Loc Qty	Loc Code
ST297	257	
114915	257	x1

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased

No

230

Each

451.0000

4

4

AN3C6A

BOLT

**

JK 11/07/13

Location

Loc Qty

Loc Code

FP001

1

111982

1

ST351

450

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

5

118422

13

119449

21

120423

3

120693

158

121682

200

JK

MS21043-6

Purchased

No

230

Each

618.0000

4

4

MS21043-6

NUT

**

JK 11/07/13

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

598

117887

2

118384

96

120308

500

JK

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3493-1 Manufactured No

250 Each 127.0000 2 2

D3493-1

Washer

**

SD 12-8-88

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST050	127	
77573	1	
82023	26	
83097	100	

MS21083C8 Purchased No

250 Each 81.0000 2 2

MS21083C8

NUT

**

HL 12/02/31

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
304	75	
121185	29	
121349	46	
FP002	1	
115884	1	
ST303	4	
115884	0	
118077	1	
119309	2	
119638	1	
ST304	1	
121524	1	

AN8C21A Purchased No

250 Each 57.0000 2 2

AN8C21A

BOLT

**

HL 12/02/31

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST343	57	
118758	3	
121167	4	
121275	50	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 85146

85146

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2741

Manufactured No

250

Each

20.0000

1

1

D2741

Blade, 350 Skidtube

**

HL

01/06/13

Location

Loc Qty

Loc Code

ST

-10

ST466

30

71856

1

79516

19

B83135

XL

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN8C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

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SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER
NO. 85146 MLJ

12/06/04

GENERAL NOTES:

- 1) MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- 8) WELD PER DART QSI 004
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER
- 11) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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2010-09-15

A		NEW ISSUE		SC	10.08.09
REV		DESCRIPTION		BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC.			
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CHECKED		DRAWING NO.		REV. A	
MFG. APPR.		D4168		SHEET 1 OF 11	
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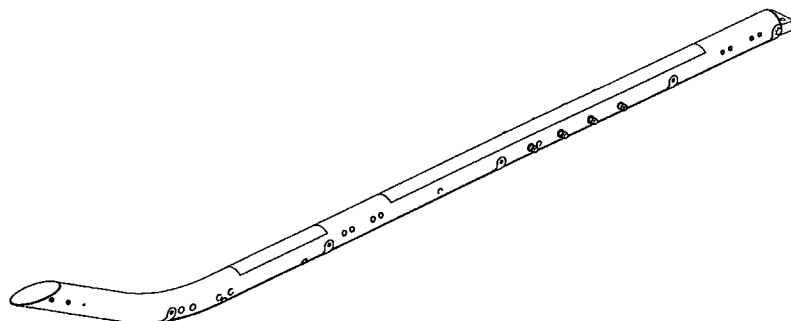
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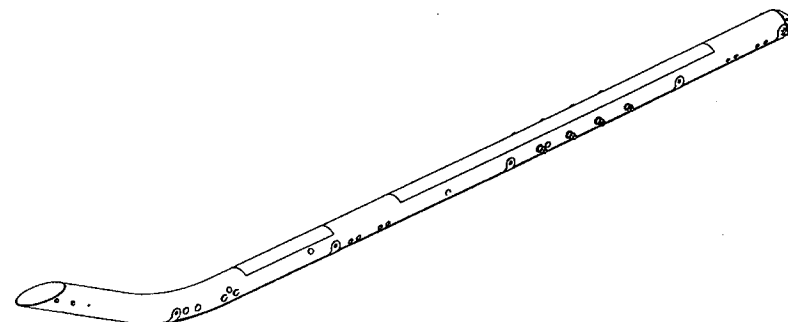
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NOTE: Date & initial all entries

25146



D4168-041 350 SKIDTUBE ASSEMBLY, LH



D4168-042 350 SKIDTUBE ASSEMBLY, RH

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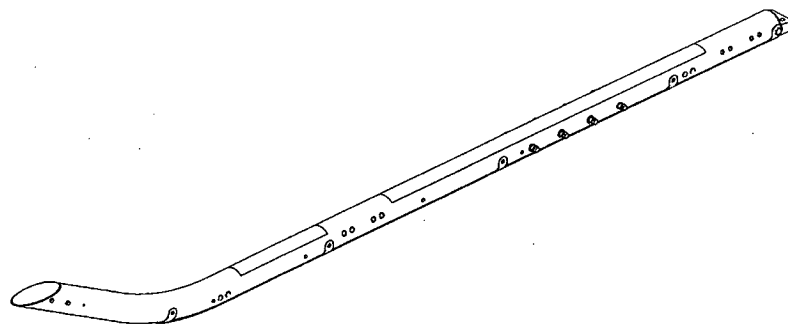
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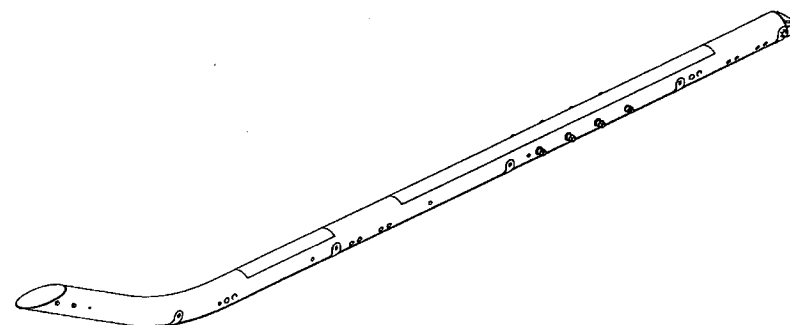
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05146



D4168-043 350 SKIDTUBE ASSEMBLY, LH



D4168-044 350 SKIDTUBE ASSEMBLY, RH

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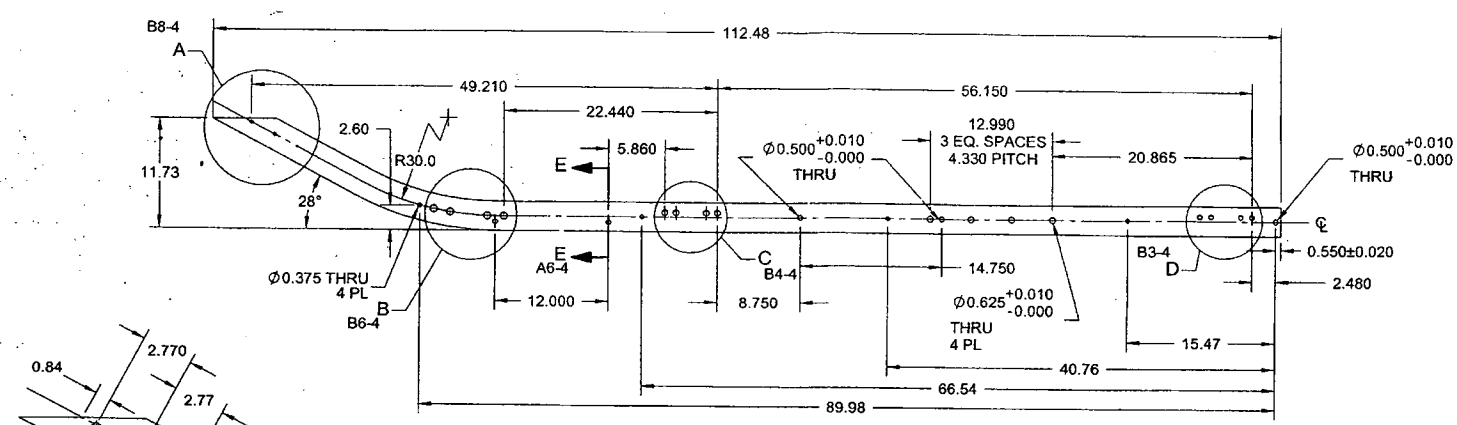
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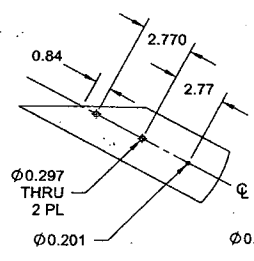
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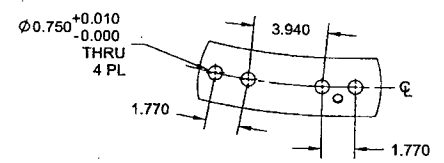
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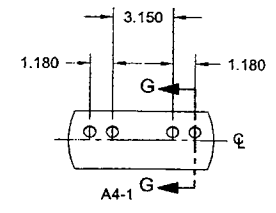
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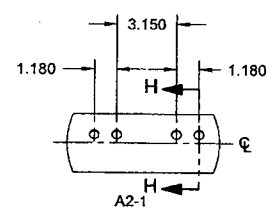
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SCALE 2X



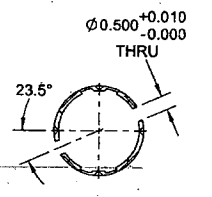
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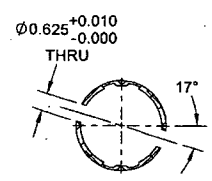
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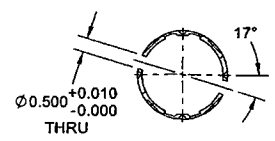
DETAIL D
SCALE 2X



SECTION E-E
SCALE 3X, 2 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

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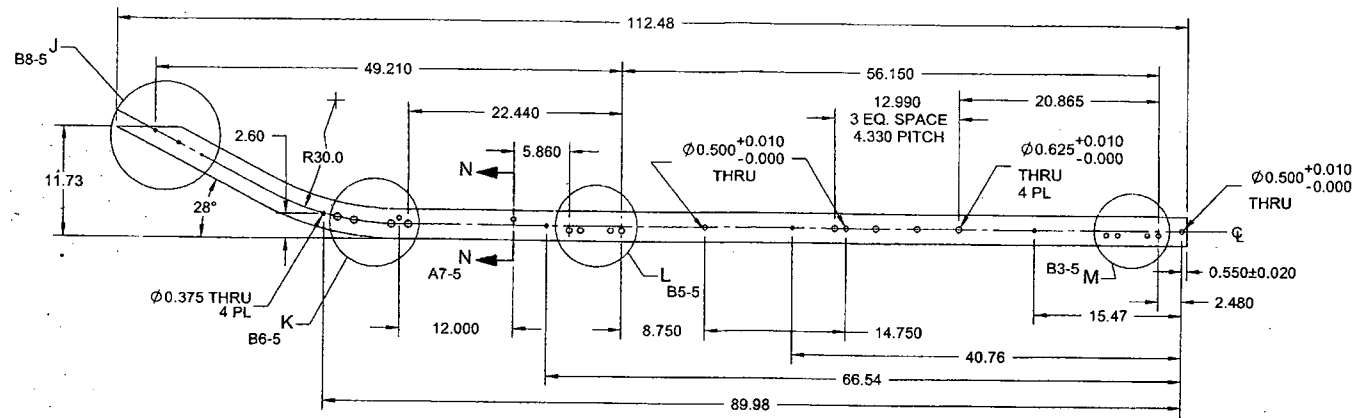
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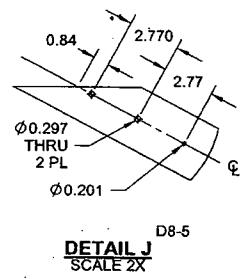
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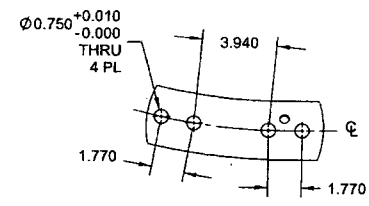
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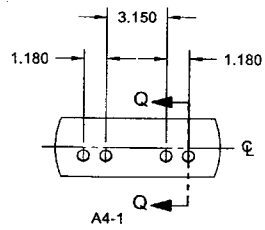
D4168-2 RH SKIDTUBE



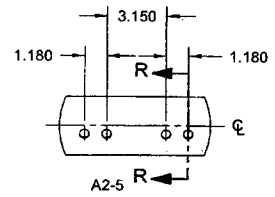
DETAIL J
SCALE 2X



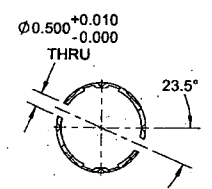
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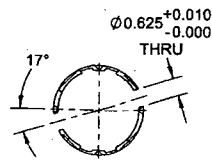
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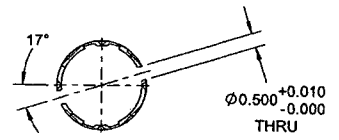
DETAIL M
SCALE 2X



SECTION N-N
SCALE 3X, 2 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

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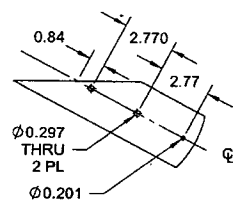
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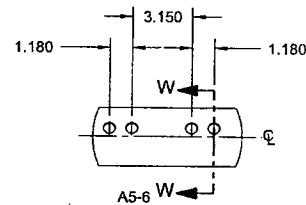
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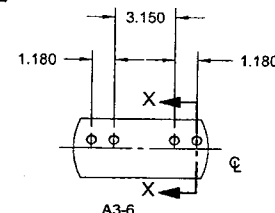
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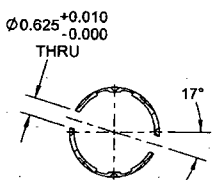
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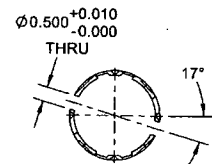
DETAIL T
SCALE 2X



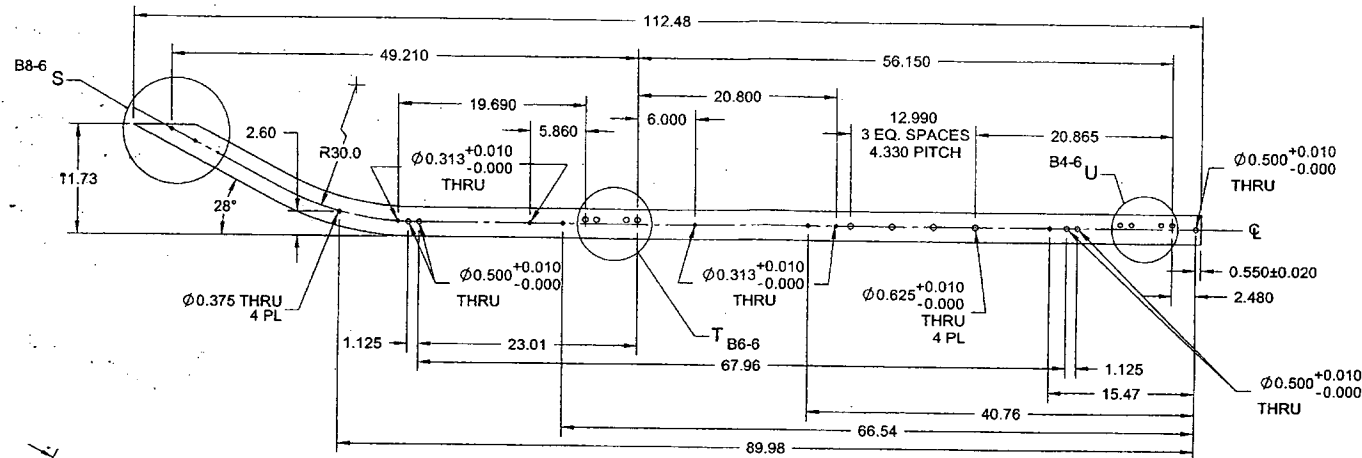
DETAIL U
SCALE 2X



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL



D4168-3 LH SKIDTUBE

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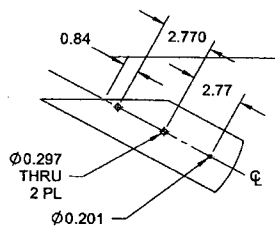
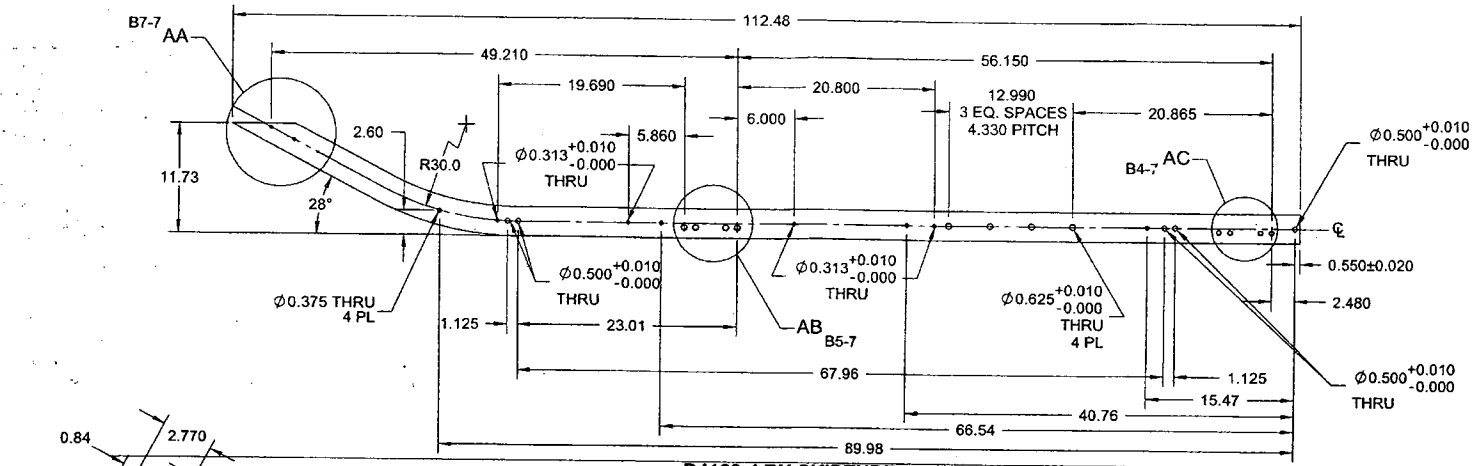
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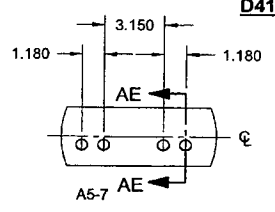
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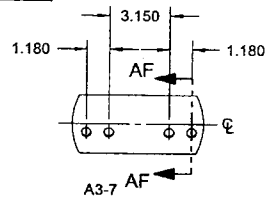
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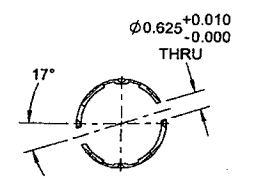
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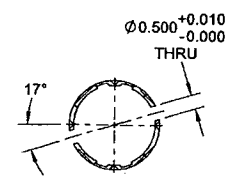
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SCALE 2X



DETAIL AC
SCALE 2X



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

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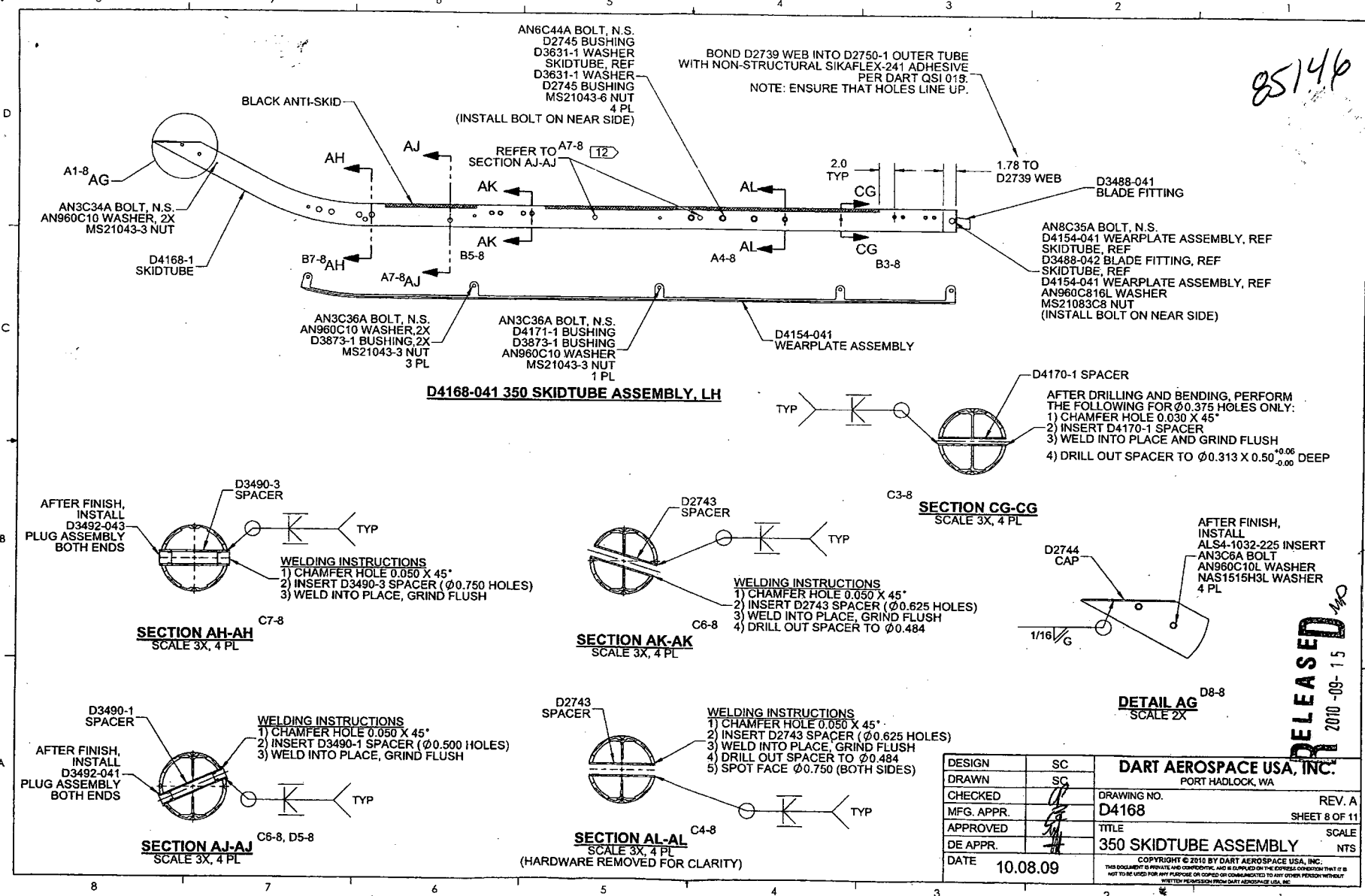
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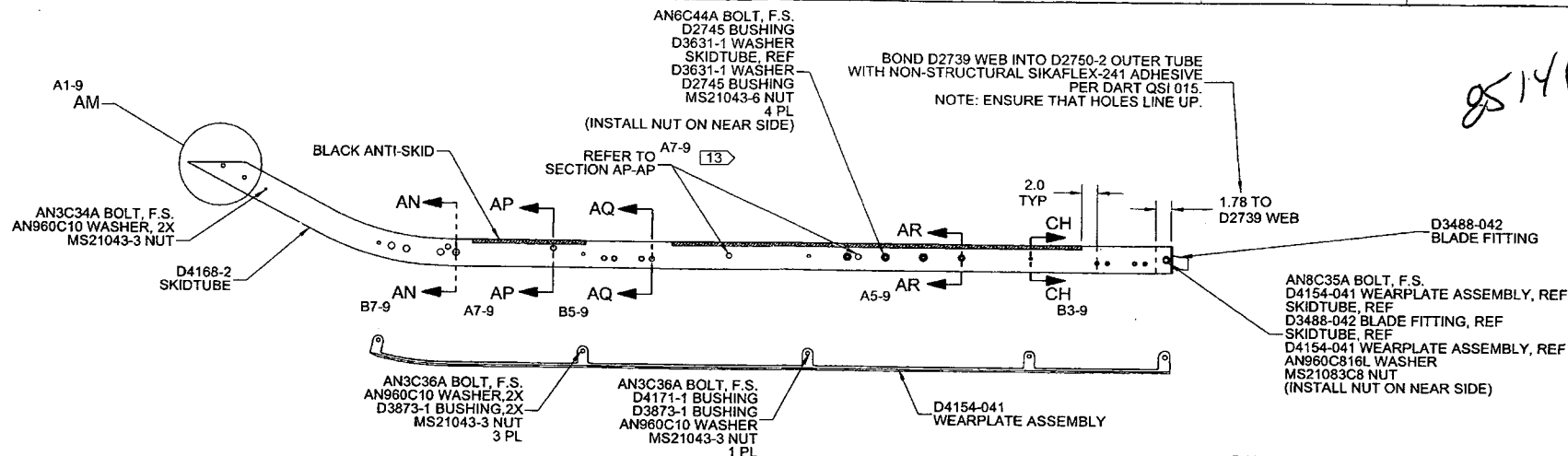
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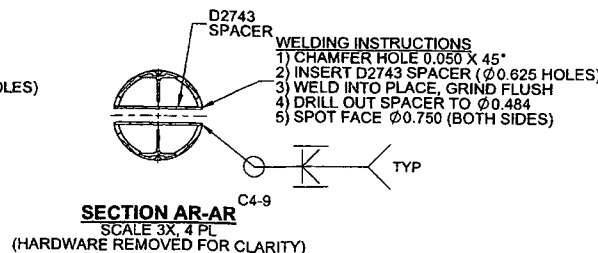
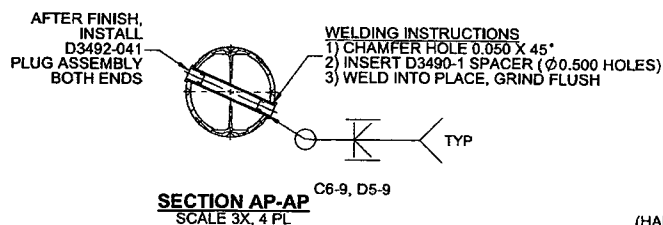
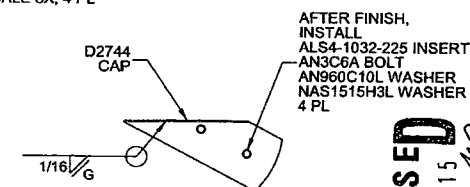
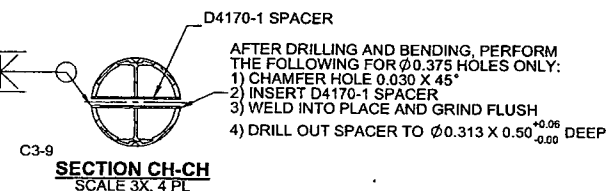
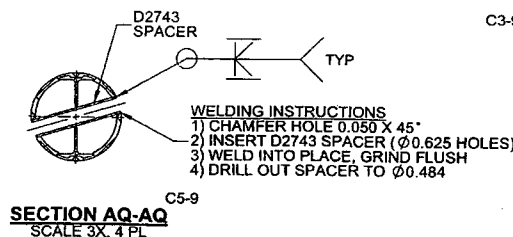
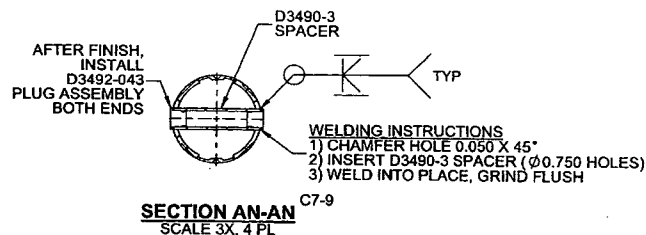
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D4168-042 350 SKIDTUBE ASSEMBLY, RH



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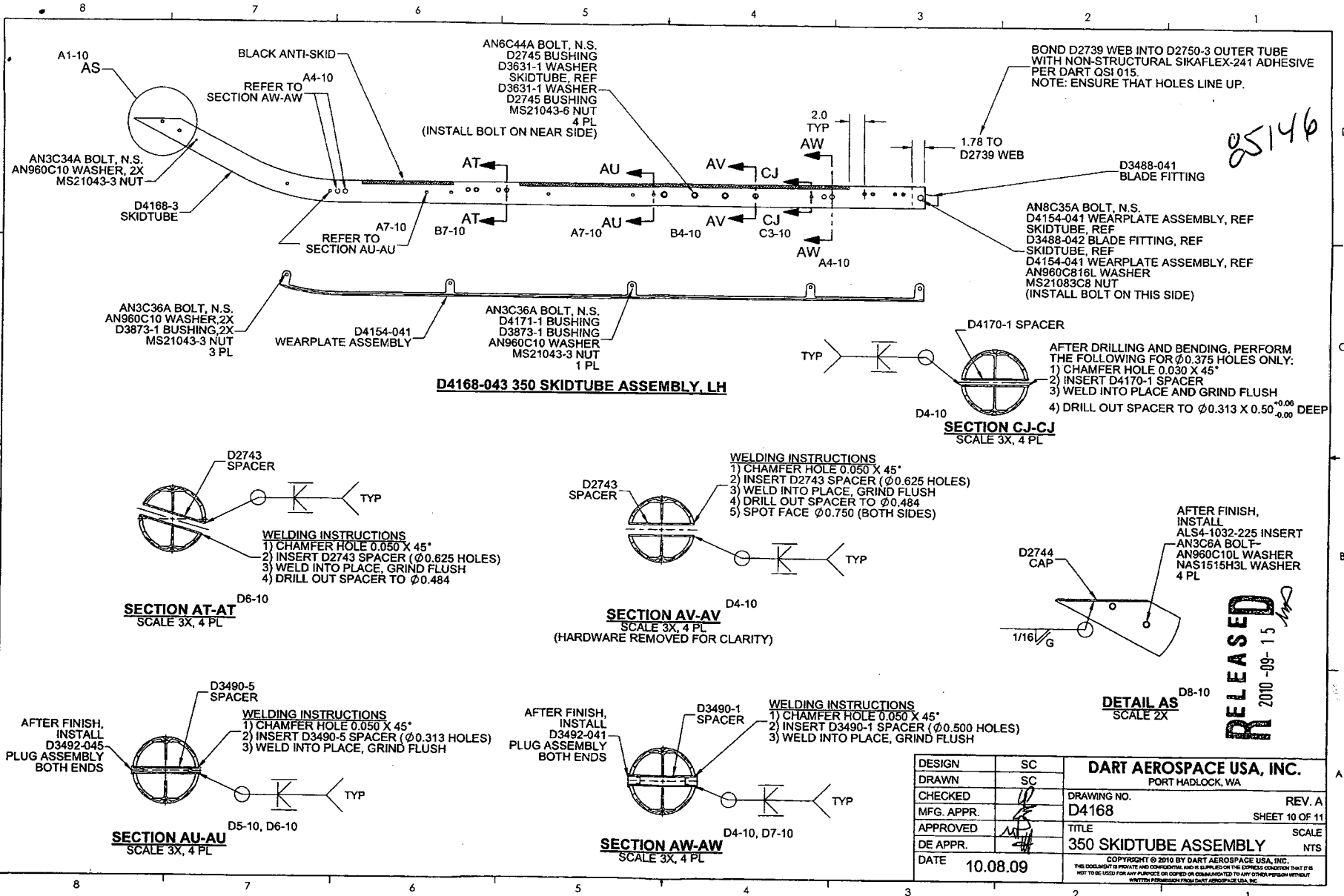
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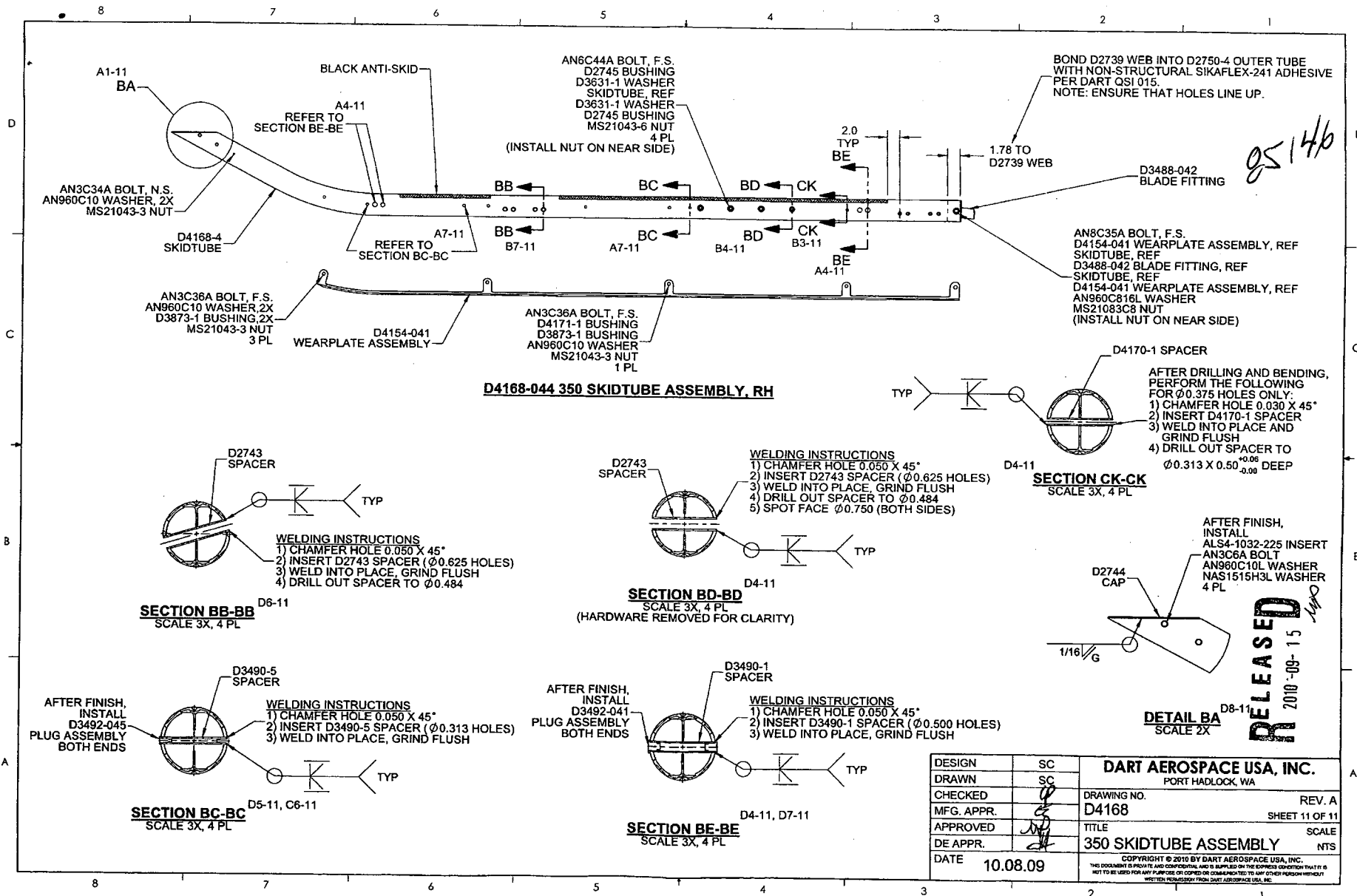
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	SC	DRAWING NO.	REV. A
MFG. APPR.	SC	D4168	SHEET 11 OF 11
APPROVED	SC	TITLE	SCALE
DE APPR.	SC	350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.	
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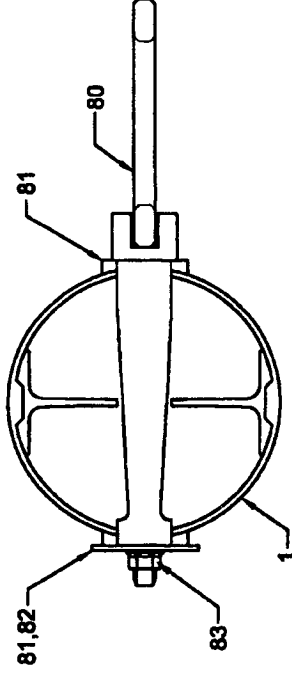
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

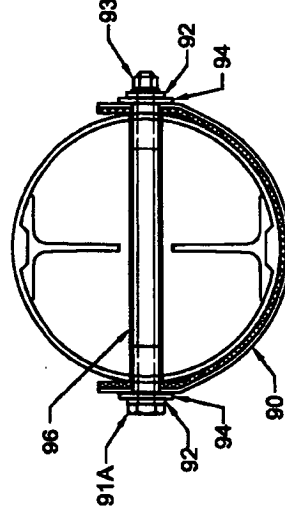
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



SECTION R-R
SHOWN WITH DRILLED Ø0.625" HOLE &
D350-636-109 TOW RING KIT

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 85746 MLJ
12/07/24



SECTION S-S
D350-636-015/-016/-017/-018/-215/-216/-217/-218
SKIDTUBES, 3 PL

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COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Revision: **I**
Date: 10.10.25

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

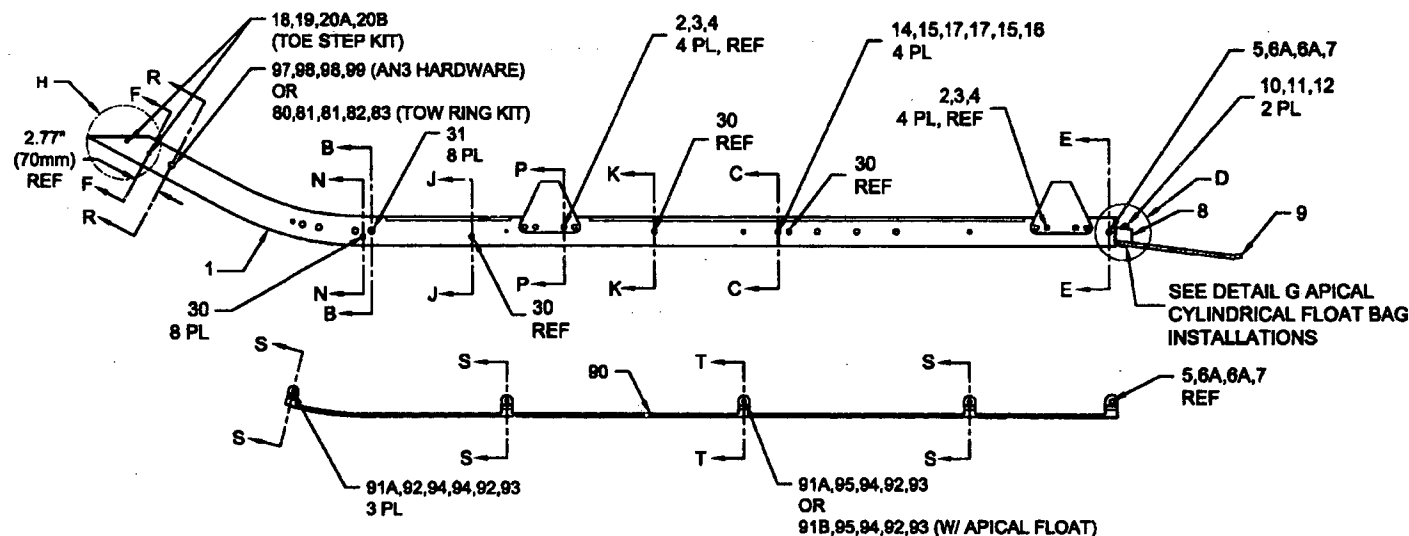
QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

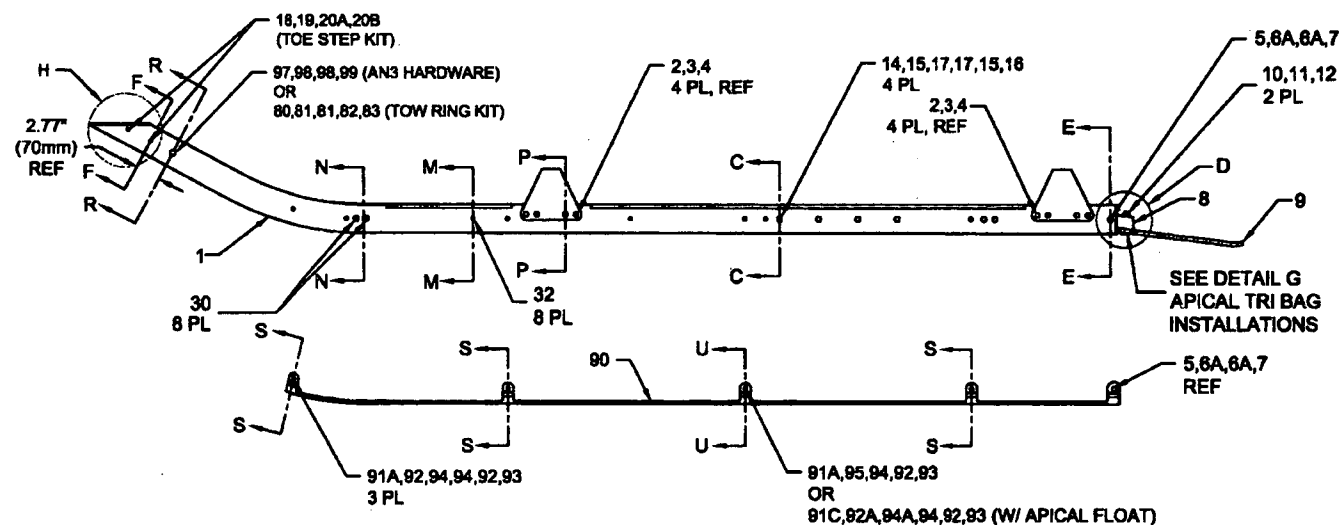
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
---	---	---	--	---



D350-636-015/-016/-215/-216
(Aerazur/Apical Cylindrical)



D350-636-017/-018/-217/-218
(Aircruiser/Apical Tri-bag)

Figure 3: D350-636-015/-016/-017/-018/-215/-216/-217/-218 SKIDTUBE ASSEMBLY

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Revision: I

Date: 10.10.25

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

NO. 298

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job #: 87012
Part #: A350-636-014
Description: Skid tube
Welding Process: Tig ☒ Mig ☐
Base material: Alum. in.
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Penetration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Fusion:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Cracks:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Overlap (cold lap)	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Undercut:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Pin holes:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Porosity (surface):	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Coloration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Burn through:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>

Qualifier David Reed Date of Test Coupon 12.07.23

Welder Barclay Elliott Date of Test Coupon 12-07-23

The above named individual is qualified in accordance with AWS D17.1.2001 to weld